

Amendments to the Specification - pages 3 & 4

Urethanes, Series 90, Formation #94 (~~see attached Document A~~). This particular material is manufactured by Rogers Corporation in Woodstock, Connecticut. Figure 1 shows the perimetral outline (the perimeter) of the overall expanse of insole 10, and as will shortly become apparent, two key layers which make up the insole extend substantially throughout the entirety of this expanse.

Layer 12, formed preferably from a material like that just specifically identified, has a shock cushioning behavior whereby (a) it deforms in an acceleration-rate-sensitive manner (the greater the acceleration, the slower the responsive deflection), and (b) returns slowly from such a deformation toward an undeformed condition without exhibiting any appreciable spring-like mannerisms. A spring-action response to a deflection, as such is now being discussed in relation to the present invention, occurs where a material effectively reacts to, and tends to return from, a force/impact deflected condition with a felt return force, and in a time-frame, that generally match those of the event which has produced the subject deflection. A non-spring-like response, which is characteristic of layer 12, takes the form of a return (from a shock-force/impact deflection) that is retarded over time, and characterized by a lowered, overall-felt, return-force behavior. In a sense, a material behaving in this non-spring-like manner tends to "creep" back toward an undeformed condition. This is how layer 12 behaves in insole 10.

Another important advantage which is offered by layer 12, formed with a material like that mentioned above, is that it tends to flow (at a creep) with heat and compression, and thus tends to deform gradually to create an upwardly facing, topographically-conforming, foot-support surface

which tends to complement and "follow" the configuration of the underside of a supported foot.

Layer 12 herein preferably has a thickness of roughly of about 3/16-inches -- a thickness which has been found to be quite appropriate in many insole applications.

Suitably surface-bonded to the upper surface of layer 12 is a thin fabric moisture-wicking, low-surface-friction and abrasion-wear layer 14. Preferably, layer 14 is formed of a woven-fibre fabric material, such as that described in attached Document B, known as HEATHERSTONE®, made by Lee Fashion Fabrics, Inc., in Gloversville, New York. Fabric layer 14 herein has a thickness preferably of about 1/64-inches, and includes elongate, stretch-resistant fibres (see 14a in the figures) that function as tension-active, load-distributing components in the fabric.

Layer 14 plays several important cooperative roles (i.e., cooperative with layer 12) in insole 10. One of these involves furnishing a wear surface to protect the longevity of the underlying cushioning layer, and to do so without appreciably diminishing the cushioning and shock-absorbing capabilities of that layer. Another involves furnishing a surface which has a low coefficient of sliding friction, so as to minimize friction heat which develops around the foot of a user during normal shoe use. A third important function for this layer is that it wicks moisture which typically develops in a shoe, and carries this moisture efficiently to the side edges (perimeter) of the insole where that moisture can quickly evaporate, and in so doing, provide cooling within a shoe. A fourth significant function of layer 14 is that its fibres act as elongate load-distributing elements that aid in spreading localized load events to a broader area within insole 10.